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| APPLICATION NO                             | ). I | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|------|-------------|-------------------------|---------------------|------------------|
| 09/937,419                                 |      | 09/26/2001  | Eric Thelen             | PHD99,144           | 2116             |
| 2101                                       | 7590 | 06/28/2004  | 79                      | EXAMINER            |                  |
|  |      | NSTEIN LLP  | VO, HUYEN X             |                     |                  |
| 125 SUMMER STREET<br>BOSTON, MA 02110-1618 |      |             |                         | ART UNIT            | PAPER NUMBER     |
| ,  |      |             |                         | 2655                | 6                |
|  |      |             | DATE MAILED: 06/28/2004 |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | <u> </u>   |                              |  |  |  |  |
|--|--|------------------------------|--|--|--|--|
|  | Application No.  | Applicant(s)                 |  |  |  |  |
|  | 09/937,419   | THELEN ET AL.                |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit                     |  |  |  |  |
|  | Huyen Vo   | 2655                         |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |  |                              |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |                              |  |  |  |  |
| Status   |  |                              |  |  |  |  |
| 1) Responsive to communication(s) filed on 26 Se   | eptember 2001.   | •                            |  |  |  |  |
|  | action is non-final.   |                              |  |  |  |  |
| 3) Since this application is in condition for allowar  | nce except for formal matters, pro   | secution as to the merits is |  |  |  |  |
| closed in accordance with the practice under E   | x parte Quayle, 1935 C.D. 11, 45   | 33 O.G. 213.                 |  |  |  |  |
| Disposition of Claims  |  |                              |  |  |  |  |
| 4)  Claim(s) 1-7 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-7 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.   |  |                              |  |  |  |  |
| Application Papers   |  |                              |  |  |  |  |
| <ul> <li>9) ☐ The specification is objected to by the Examiner.</li> <li>10) ☐ The drawing(s) filed on 26 September 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>  |  |                              |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |                              |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |  |                              |  |  |  |  |
| Attachment(s)  |  |                              |  |  |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date <u>5</u>.</li> </ol>  | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: |                              |  |  |  |  |

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#### **DETAILED ACTION**

#### Information Disclosure Statement

1. The information disclosure statement filed 9/26/2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Hedin et al. (US Patent No. 6185535).
- 4. Regarding claim 1, Hedin et al. disclose a distributed speech recognition system for recognizing a speech input signal (*col. 4, In. 66 to col. 5, In. 17*).

the system including at least one client station and a server station (*col. 4, In. 66* to *col. 5, In. 17*);

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the client station including means for receiving the speech input signal from a user and means for transferring a signal representative of the received speech to the server station via the public Internet (col. 5, In. 1-55); and

the server station including means for receiving the speech equivalent signal from the public Internet and a large/huge vocabulary speech recognizer for recognizing, the received speech equivalent signal (col. 5, In. 1-55);

characterized in that the client station includes a local speech recognizer and a speech controller (*figure 2 and col. 4, In. 66-67*);

the speech controller being operative to direct at least part of the speech input signal to the local speech recognizer and in dependence on an activation or speech routing voice command recognized by the local recognizer, selectively directing a part of the speech input signal via the public Internet to the server station (col. 5, In. 1-55, if speech command is not supported by the local device, the speech input is sent to the server for recognition).

5. Regarding claims 2-3, Hedin et al. further disclose that the local speech recognizer of the client station is a limited speech recognizer, such as a small vocabulary or keyword recognizer (*col. 4, In. 66 to col. 5, In. 17*), and the speech controller is operative to send, in response to recognizing, the activation command, an activation instruction to the server and to direct the speech input signal to the server station (*col. 7, In. 14 to col. 8, In. 65*).

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- 6. Regarding claim 4, Hedin et al. further disclose that the recognizer is operative to recognize at least one spoken command/control instruction relating to the operation of the local client station and the speech controller is operative to issue a machine control instruction corresponding to the recognized command/control instruction to a station controller of the local client station (col. 7, In. 14 to col. 8, In. 65).
- 7. Regarding claim 7, Hedin et al. disclose a method of recognizing a speech input signal in a distributed system including at least one client station and a server station, the method including:

receiving in the client station the speech input signal from a user (col. 4, In. 66 to col. 5, In. 17);

recognizing at least part of the speech input signal in the client station (col. 4, In. 66 to col. 5, In. 17);

selectively directing a signal representative of a part of the speech input signal via the public Internet from the client station to the server station, the directing being in dependence on an activation or speech routing voice command recognized by the recognizer in the client station (*col. 5, In. 1-55*);

receiving the speech equivalent signal in the server station from the public Internet and recognizing the received speech equivalent signal in the server station using a large/huge vocabulary speech recognizer (col. col. 9, In. 1-35).

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8. Regarding claim 5, Hedin et al. further disclose that characterized in that the system includes a plurality of server stations (*col. 8, In. 66 to col. 9, In. 3*), the speech controller being operative to selectively direct the speech input signal to at least one associated server in response to recognizing a corresponding speech routing command (*col. 11, In. 57 to col. 12, In. 7*).

### Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hedin et al. (US Patent No. 6185535) in view of Baker (US Patent No. 6122613).
- 11. Claim 6 is dependent on claim 1, which is anticipated by Hedin et al. for reasons noted above.
- 12. Regarding claim 6, Hedin et al. further disclose the speech controller being operative to direct at least a part of the speech input signal to the server station if a performance indicator for a recognition result of the speech recognizer in the local client station is below a predetermined threshold (col. 5, In. 15-20, inherently indicates that the

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recognizer matches parameters representative of input speech to parameters stored in memory and matching scores are generated. Only an acceptable score is regarded as the recognized word); the server station being operative to transfer a recognized word sequence back to the client station (col. 5, In. 18-33).

Hedin et al. do not disclose that the speech recognizer of the client station is a large vocabulary speech recognizer; and the client station including a selector for selecting a recognized word sequence from the word sequences respectively recognized by the recognizer in the client station and recognizer in the server station. However, Baker teaches that the speech recognizer of the client station is a large vocabulary speech recognizer (*figure 1*); and the client station including a selector for selecting a recognized word sequence from the word sequences respectively recognized by the recognizer in the client station and recognizer in the server station (col. 9, In. 1-17).

Since Hedin et al. and Baker are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Hedin et al. by incorporating the teaching of Baker in order to enhance the speech recognition system's capabilities at the client device to recognize a wider range of input speech words.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dragosh et al. (US Patent No. 6078886) teach a system and

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method for providing remote speech recognition services that is considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Vo whose telephone number is 703-305-8665. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Huyen X. Vo

June 22, 2004

W. R. YOUNG PRIMARY EXAMINER